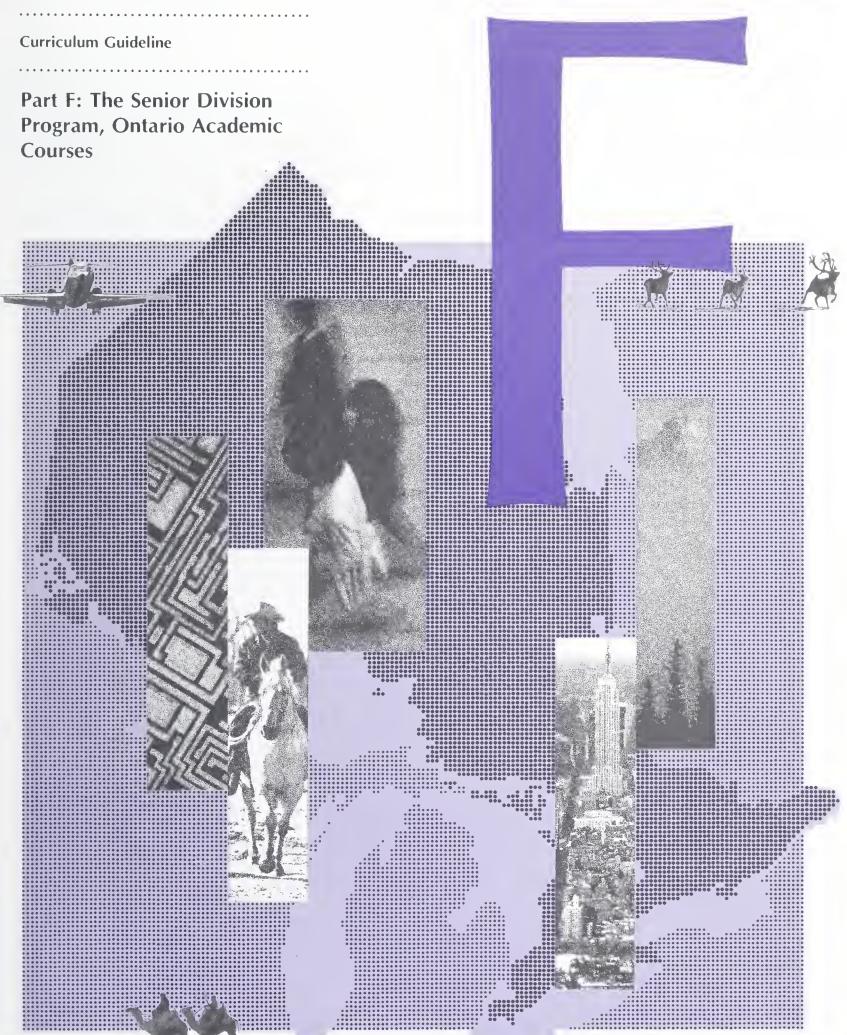
GEOGRAPHY

Intermediate and Senior Divisions, 1988





Ministry of Education

Chris Ward, Minister Bernard J. Shapiro, Deputy Minister Digitized by the Internet Archive in 2019 with funding from University of Toronto

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INTRODUCTION



This document provides for two Ontario Academic Courses (OACs), World Issues: Geographic Interpretations and Canada: Environment and Economy.

OACs in geography are intended primarily for students who plan to enter a program of studies (not necessarily in geography or geography-related programs) at a university. Courses of study developed from this document must provide for the depth of treatment and academic standards appropriate for this purpose. For this reason no fractional credit less than one shall be granted.

The prerequisite for admission to either OAC is one Senior Division advanced-level credit in the social sciences. Schools may offer one OAC for a maximum of one credit for each course outline described in the following pages. Up to 20 per cent of scheduled class time may be allocated

to out-of-school activities. While out-of-school activities may include field studies or independent studies, no additional co-operative education credits are allowed at the OAC level. The credit for an OAC in geography may be counted among those required for an Ontario Secondary School Diploma.

The learning process in OACs should assist students to acquire attitudes, knowledge, and skills that will help them to succeed in further education or in the world of work. The OACs should require students to employ regularly such higher-order thinking processes as analysis, synthesis, and evaluation. They should also assist students to become increasingly self-directed in preparation for further studies. They should develop a desire for lifelong learning as well as the ability to analyse issues; to solve problems; to locate, evaluate, and organize information for a purpose; and to communicate clearly with others. Within the objectives described below for either OAC in geography, students should play a significant part in shaping and identifying topics and questions worthy of study.

OAC studies should provide students with opportunities to acquire a substantial body of knowledge, in the light of which local, national, and international events can be viewed and assessed. The careful selection of an appropriate content base is important. However, the accumulation of facts, no matter how detailed or comprehensive, may not lead students to understanding. Students require central ideas and organizing principles that will help them to make sense of the information they acquire. The study of current events can provide them with motivation and stimulation, as well as the understanding of current developments that they will need to become geographically literate citizens.

MAJOR PLANNING CONSIDERATIONS FOR GEOGRAPHY OACS



Sequence

When planning or implementing these courses, teachers should refer to Parts A and B of this guideline.

The sequence provided in the organizational chart for each course is a suggested one only. Teachers may wish to reorder the sections or the objectives within the sections. Furthermore, although each course has been divided into four sections, the intent is not to segregate topics of study. Teachers may wish to teach certain objectives listed under one section by integrating them into the study of another section.

Teaching-Learning Strategies

Teachers shall ensure that students spend a minimum of 20 per cent of the time available in independent study. Students should use this time allocation to relate the information and concepts that they develop as the year progresses to new situations and applications. Independent-study activities may be spread throughout the course or concentrated in a specific unit or units.

Field work is an integral part of the geography program, and up to 20 per cent of the available course time may be allocated to out-of-school activities such as library searches, information retrieval, and field work. Students should have opportunities to plan and carry out a field study to obtain primary data for study purposes. Opportunities exist within the framework of these courses for students to undertake a study of accessible environments, industries, and other sites related to Canadian geography or to the world issues under study.

Student Readiness

The prerequisite to these eourses is one Senior Division advanced-level eredit in the social seienees. This suggests that many elasses will be heterogeneous, including students with a wide range of backgrounds in geography. It is expected that an appropriate emphasis will be placed on the teaching of the various unit objectives to accommodate that diversity. It should be noted that almost all students taking these courses will have studied Canada in the Intermediate Division compulsory course, Geography of Canada.

Attitudinal, Knowledge, and Skills Objectives

The attitudinal objectives listed for each section in these two courses shall be integrated with the knowledge and skills objectives when the sections are planned and implemented. These objectives may well provide excellent starting points for discussions or serve as the culminating ideas after a topic has been explored.

The knowledge objectives set out in the sections of each course outline shall be included in courses developed from this guideline, but teachers will determine the depth of treatment accorded to each one. As the objectives in the units are the minimal ones required, teachers may wish to add other objectives to those listed.

The skills for each section have been drawn from those listed in the charts in Appendixes 2 and 3 in Part B of this guideline. They shall also be included in courses based on the guideline, but all of them will not be accorded the same emphasis.

Although most of the geographic and inquiry skills may have been introduced in earlier grades, it will be necessary to review as well as extend them throughout this course. Depending on the abilities, interests, and needs of students, teachers may wish to add other objectives to those listed.

Assessment and Evaluation

cachers should refer to the suggestions on pages 27–28 in Part A and pages 15–16 in Part B of this guideline when planning student assessment and evaluation.

OACs are intended to prepare students to enter a program of study at a university, and assessment and evaluation procedures should be designed with this in mind. The expectations for the achievement of the knowledge and skills objectives should be appropriate for these advanced-level eourses. Assessment procedures should encourage and reward the capability of students to:

- state eoneepts, principles, and generalizations and explain their application to specific situations or issues;
- develop an appropriate foeus and organizer for an inquiry into a situation or an issue;

- derive information and communicate it coherently and correctly in both written and graphic forms;
- state a position on a situation or an issue and defend it using evidence and authoritative opinion;
- participate constructively in individual and co-operative activities such as field studies, seminars, debates, audio-visual presentations, and class presentations.

As a general rule, the allocation of marks should reflect the proportions of total course time spent on each unit of the course. Similarly, the allocation of marks within units should reflect the proportion of time used for each activity undertaken to achieve the objectives of the unit.

Both formative and summative evaluation are important in an OAC. Assignments or projects should be brief and focused so that students can receive regular feedback on their progress. Students taking an OAC in geography must write at least one formal examination. A student's results on a formal examination or formal examinations shall form 25 to 35 per cent of his or her final mark.

Fractional Credits

ACs must be taught as full-credit courses, and no fractional credit less than one shall be granted.

WORLD ISSUES: GEOGRAPHIC INTERPRETATIONS (GWI)



Introduction

ourses may be developed from this outline for a maximum of one credit. The prerequisite is onc Senior Division social science credit at the advanced level. The common course code is GWI.

Course Rationale and Overview

orld issues may be placed in two groups. The first group includes those issues that are causing concern or creating problems in many different parts of the world. These include the need for housing; for safe, reliable supplies of water; and for adequate, nutritious food. While these problems are found within countries across the economic spectrum, in places as diverse as Canada, the United States, Sri Lanka, and Ethiopia, they are essentially local in nature.

A second group of world issues are those that are interrelated and have no respect for international boundaries. Typical of concerns of this type are the effects of a nuclear disaster, the ripple effects of change in a major trading practice, and the results of the destruction of tropical rain forests. Such concerns are worldwide in their nature, since their effects may be carried by various systems from the point of origin to every corner of the world. This course is based on these two groups of world issues.

People share common physical, intellectual, and psychological characteristics, as well as common necds

for water, food, clothing, and shelter. However, these needs may differ from place to place, as the studies within this course will illustrate. In addition, although it has been said that all individuals are part of the global society, many individuals do not have equal opportunities to share the world's resources and take part in the global society in any meaningful way. A major purpose of this course is the development of students' awareness that people in all countries are influenced by events and activities in virtually all parts of the world, even though many of the people affected may not be aware of the reasons for many of the changes that affect them.

The great variety of peoples and their differing perspectives and problems are important aspects of this course. While the media in Canada and other developed countries provide immediate information on events taking place half a world away, a large proportion of the world's people may have neither the equipment to receive information nor the ability to read. Similarly, because of their increasing ability to travel, many Canadians and wealthy citizens of other countries are able to visit distant countries. In stark contrast, millions of people in other parts of the world have never travelled and never will travel beyond their immediate area. There are also many differences in needs from one society to another. For example, in one region water shortages may mean a lack of water for lawns or swimming pools; in another region a prolonged drought may bring starvation.

The disadvantaged in Canadian society may be envied by the disadvantaged in another country. One of the central themes of this course, then, is that, although all of the world's peoples seem to share common needs for water, food, elothing, and shelter, these needs actually vary somewhat in different environments and cultures.

The primary intent of the geography OACs is to provide a global perspective on contemporary issues. Studies based on global issues will assist students to increase their understanding of their world, recognize its diversity, and clarify their place in its varied, interacting systems.

Course Objectives

A course based on this outline shall provide students with opportunities to:

- identify and state the principles of environmental interaction that affect natural environments;
- differentiate between issues that occur worldwide but are local in nature and those that have worldwide implications, even though their occurrences may be limited to one or a few places;
- recognize that all use of the earth is subject to the opportunities provided and the constraints imposed by the natural environment and that this use, in turn, alters the environment;
- analyse the effects of technological ehange on the capacity of people to ehange their environment;
- investigate and evaluate the effects of human activity on environments under different resource-management strategies;

- examine issues and predict effects arising from the current distribution of, and projected changes in, world population;
- comprehend the cultural, economic,
 and political aspirations of ethnic
 and national groups as they affect
 world issues;
- demonstrate an appropriate level of skill in applying the geographic and cognitive inquiry skills outlined in Part B of this guideline;
- develop the ability to recognize issues, to make value judgements, and to identify opportunities for positive action;
- clarify and test their personal attitudes and values with respect to individual and collective responsibility for finding solutions to issues that concern the use of the earth and its resources;
- become sensitive to the needs of other people;
- project alternative futures based on the investigation of current information and trends in the use of the earth;
- develop an awareness both of geography as an academic discipline and of the knowledge, skills, and techniques that give geography its unique perspective;
- demonstrate a heightened awareness of the interdependence of all people through reference to a variety of connecting links among areas and peoples around the world.

Course Organization

Section	Description	Per Cent of Course
A. Geographic Approaches to World Issues	This section provides an overview of the nature and focus of the course, sets out its scope, and assesses student backgrounds and interests. Consideration should be given to the nature of world issues that may be clarified and analysed through geographic approaches.	5-10
B. Environmental Issues	This section encourages students to examine global issues related to the environment. Students must undertake two studies.	20 – 40
C. Economic and Resource Issues	This section encourages students to examine global issues that are related to economics or resources. Students must undertake two studies.	20 – 40
D. Cultural and Political Issues	Students must undertake two studies in this section of the course. They are required to select global issues that are cultural or political in nature.	20 – 40

Course Outline

Policy and Planning Considerations

When planning or implementing this course, teachers shall refer to:

- Parts A and B of this guideline;
- the introduction to this document on page 2;
- the major planning considerations for geography OACs on pages 3-5 in this document.

Section A: Geographic Approaches to World Issues

eography offers a meaningful way of looking at the earth, rather than an inventory of the earth's contents. Geographic studies are based on a number of fundamental, intertwined conceptions: location, pattern, spatial interaction, human interaction with the environment, and region. A geographic approach involves a search for patterns of distribution, the processes that produce them, and the associations that help to explain ways in which people use and change the face of the earth. It is recommended that teachers review "The Foundations of the Geography Curriculum", on pages 7-15 in Part A of this guideline, together with other sections referring to the place of the knowledge component in geography courses.

The term *issue* refers to a question, concern, or problem that has reached the stage of dialogue. By studying an issue, students will come to realize that there are at least two and, most often, many points of view on a situation. They will be able to understand the rationale for and to debate the various positions.

In this course students examine significant world issues of three types: environmental; economic or resource-related; and cultural or political. This introductory section differentiates between issues that, although wide-spread, are essentially local in nature and those that are interrelated and

have worldwide consequences. The former include such concerns as political unrest, inadequate housing, and crime; the latter, such global phenomena as nuclear disaster, climatic change, and extensive deforestation.

In this section students will learn to organize large amounts of information in order to understand and resolve issues. They will also analyse patterns and processes to find associations and relationships. The perspectives brought to the study are both spatial and environmental. The section should demonstrate to students the need to develop competency in research, inquiry, communications, data-management, and statistical techniques.

The typical study could follow the inquiry model described in Appendix 2 in Part B of the guideline; the following is an alternative approach:

- 1. Definition of the issue
- 2. Identification of related patterns and processes, at various scales, that are based on (a) physical geography and (b) human geography
- 3. Description of the systems at work: the global systems of action, reaction, and interaction, which may

translate local occurrences into events with worldwide consequences

- 4. Analysis of the effects of the issue under study: the scale of impact(a) on the environment and(b) on people
- 5. Identification of alternative actions (What can be done?): (a) short-term steps and (b) long-term solutions
- 6. Decision making: the determination of policies, the conducting of cost-benefit analyses
- 7. Implementation of the policies determined

This initial section provides an overview of the course and determines the components that will receive the greatest emphasis. Many students bring specific knowledge and experience to the classroom. This section should help teachers determine what students know, what they need to learn, and what their interests are before they begin to study the later sections of the course. It would be useful to select and work through one of the issues from the lists found within sections B, C, or D to illustrate how studies can be organized.

Attitudinal Objectives

Students shall be provided with opportunities to:

- establish, to a reasonable degree,
 personal goals for participation and
 achievement in the course;
- develop an inquiring attitude towards current issues;
- develop a critical, questioning attitude when dealing with information;
- make value judgements based on reasoned analysis and valid evidence.

Knowledge Objectives

Students shall:

- understand the meaning of terms such as the following: pattern, process, association, world issue;
- become familiar with the major components of an inquiry model, their purposes, and their sequence;
- examine one or more effective methods of investigating an issue;
- understand the significant concepts related to the content base selected;
- recognize what constitutes a significant issue;
- describe the typical steps required to transform the information gathered in a research or field study into a published format;
- identify some of the difficulties involved in gathering information and translating it to formats that are informative, easy to read, and unbiased;
- develop opinions about the issues under discussion.

Skills Objectives

Students shall:

- demonstrate good questioning teehniques;
- raise questions about the validity of information;
- resist reaching eonelusions until they have examined and discussed all the evidence:
- use a report from one of the media as the basis of an inquiry;
- find the locations of news events on appropriate maps;
- analyse an event or a situation to determine eause-and-effect relationships;
- evaluate information for aeeuraey and bias;
- assess the reliability of the sources of data used;
- determine whether information is faet or opinion;
- draw conclusions from the information assembled;
- select the best mode for communicating data.

Section B: Environmental Issues

The natural environment is the source of most of the resources required to meet human wants and needs. The demand for these resources intensifies as more people use the environment and as their levels of expectation rise. The eombination of population growth and rising expectations brings into question past attitudes towards the use of the environment. It has become increasingly elear that humans must not overestimate the resilience of the physical environment. Both human activities and natural events ean, and do, ereate environmental imbalanees that have long-term or irreversible effects. While many environmental systems remain in a steady state or change slowly over time, others ean ehange quiekly and drastieally. These eoneerns may esealate and become issues.

A general overview of eurrent environmental issues should initiate studies in this section. However, while the emphasis and focus of study should be placed on environmental issues, opportunities should be sought to broaden each topic or to integrate aspects of sections C and D into the study. As well, current events should have an influence on the issues chosen for study or be related to them whenever the opportunity arises.

There are many environmental issues that ean serve as possible topies for study. Teachers shall select two major issues from or similar to those included in the accompanying list. The issues chosen for study must be global in nature.

Environmental Issues: A Checklist

- elimatie ehange: greenhouse effeet, desertification, permafrost modifieation, ozone depletion
- human intervention: deforestation, damming, irrigation, overfishing, fertilizing, introduction of exotic species, waste disposal, acid precipitation, nuclear contamination, agriculturalland degradation
- the preservation of genetic diversity
- eollective responsibility in environmental issues: laws, treaties, organizations, ageneies
- soil erosion
- salinization
- endangered species
- the role of teehnology in modifying and managing environments: inseetieides, herbieides, fertilizers, biological controls, disease control

Attitudinal Objectives

Students shall be provided with opportunities to:

- develop personal definitions that distinguish between the terms *needs* and *wants*;
- become sensitive to values issues, recognizing that there are a variety of societal attitudes towards natural environments and their use;
- recognize that different people may hold opposing views on a single environmental issue;
- identify principles and concepts on which the resolution of environmental issues should be based;
- derive satisfaction from the process and product of independent research.

Knowledge Objectives

Students shall:

- understand the reasons why people intervene in an ecosystem;
- investigate specific examples of ways in which people have changed their environment;
- examine both positive and negative outcomes of environmental changes;
- study specific environmental concerns that are seen as "issues";
- understand the background information on at least two environmental issues;

- understand adequately the specific terminology used to describe concepts and processes associated with environmental systems;
- eonsider the points of view put forward by those involved in each of the issues studied, together with the rationales behind the different opinions;
- become aware of the strengths and weaknesses of a representative sample of maps, graphs, charts, and printed data in communicating information concerning an issue;
- learn the accepted format for bibliographies and footnotes in written essays and reports.

Skills Objectives

Students shall:

- find the locations of news events on appropriate maps;
- analyse an event or a situation to determine cause-and-effect relationships;
- evaluate information for accuracy and bias:
- assess the reliability of the sources of data used;
- determine whether information is fact or opinion;
- draw eonelusions from the information assembled;
- select the most appropriate mode for communicating information involving relationships, inferences, and change;
- find useful sources of geographic information, including reference books, data bases, yearbooks, and back issues of newspapers, magazines, and periodicals;
- retrieve information by beeoming familiar with the format of several sources of information (e.g., microfilm of newspapers and magazines, publications such as "Facts on File", data banks such as INFO GLOBE);
- use overlay maps to demonstrate relationships;
- obtain opinions from people who are knowledgeable about the subject under study;
- write descriptions of the differing points of view held by people on a single topic or issue.

Section C: Economic and Resource Issues

Disparity among countries and between the rich and poor within countries has been a recurring issue. As well, economic specialization and the internationalization of production are bringing about new global economic patterns, and vastly improved means of communication and cooperative agreements among governments have drawn some countries closer together to meet mutual goals. Such developments have often been accompanied by the concerns of other countries that have been negatively affected, and these concerns have often escalated into issues.

The capacity of the earth to sustain human populations depends largely on the ability of people to identify, usc, and conserve resources. Resources, therefore, can be defined only in a cultural context. Even with knowledge, technology, trade, capital, and suitable political organization, natural resources may lie unused or underused or be used in a wasteful manner. The demand for key commodities, resource ownership and management, and the changing resource base are factors that affect the use of resources around the world.

Technological development is causing rapid change in the world. While technology can solve old problems, it can also create new ones: the development of nuclear energy and the increasing use of chemicals for fertilizers and insect control serve as examples. The applications of technology can result in conformity, dependency, standardization, and the control of entire populations, and thus many of these applications can be viewed as threats to human liberty. Students should become aware of the implications of technology for the lives of people.

A general overview of current global economic and resource issues should initiate studies in this section. While the emphasis and focus of study should be placed on economic and resource issues, opportunities should be sought to broaden each topic or to integrate aspects of sections B and D into the study. As well, current events should have an influence on the issues chosen for study or be related to them whenever the opportunity arises.

There are many economic and resource issues that may serve as possible topics for study. Teachers shall select two major issues from or similar to those included in the accompanying list, one having an economic focus and one having a resource focus. The issues chosen for study shall be global in nature.

Economic and Resource Issues: A Checklist

- investment in, production of, trade in, and consumption of key commodities: foods, fuels, wood, metals, fibres
- energy: production, consumption, competition
- changing resource bases: ownership and management
- the growth of an information society
- the effects of multinational corporations, allocations of capital, the locating of economic activities, and new trade patterns on different countries
- the technology used in the gathering and processing of data: satellite sensing, instrumentation, data processing, computing, data analysis, data networks
- technological applications in the field of energy that have far-ranging social and economic effects
- technology and transportation: air, sea, land, space
- commercial and political organization: planned economies, market economies
- free trade and world trading blocs
- internationalization of labour
- scarcity and glut
- a resource under pressure
- forms of interdependence: trade, foreign assistance, loans, technical assistance, international agencies
- effects of international aid programs
- effects of world expenditures on armaments
- wastc management

Attitudinal Objectives

Students shall be provided with opportunities to:

- become increasingly objective in the evaluation of information;
- recognize that nations as well as individuals may hold differing viewpoints on the same issue;
- recognize that the individual has a right to defend his or her interests and a responsibility to oppose developments that are not in the interests of the public;
- evaluate the positive and negative effects of economic activities on a country.

Knowledge Objectives Students shall:

- examine specific economic concerns
 that are seen as "issues";
- examine specific resource concerns that are seen as "issues";
- understand adequately the specific terminology used to describe concepts and processes associated with economic and resource issues;
- consider the points of view put forward by those involved in each of the issues studied, together with the rationales behind the different opinions;
- learn to identify the best map, graph, or chart for the task at hand, with the understanding that each type is drawn for different purposes;
- understand that maps, graphs, and models generally show patterns and relationships rather than precise figures;
- investigate the effects of the use of various forms of technology to increase the efficiency of resource conversion, to improve productivity, or to move information;
- become aware of the types of information required for the investigation of an issue, where that information can be found, and how it may be accessed.

Skills Objectives Students shall:

- identify and analyse examples of major development projects;
- identify an economic or a resource issue and create a framework for conducting an inquiry into it;
- distinguish between relevant and non-relevant information and between fact and opinion;
- use different types of questions
 (e.g., those involving facts, definitions, correlations, decisions, and values);
- determine the reliability of sources of information and predict any potential bias;
- brainstorm as a method of finding new ways to solve old problems;
- summarize information from a variety of sources in order to make a series of accurate statements about the issue under study;
- debate the merits of proposals for solving the problem of disparity among nations;
- speak in a variety of situations, such as role-plays, panel discussions, simulations, debates, or the delivery of oral reports;
- prepare hypothetical news releases about an issue.

Section D: Cultural and Political Issues

In addition to their basic needs, people have cultural and political needs that bring them into association with other people. In recent years maps have had to be redrawn to reflect the disappearance of some political units, the emergence of others, and the relocation of national boundaries. Emerging and developing countries, as well as groups within existing countries, have established policies and programs to help them meet their goals. While the driving forces have often been cultural (e.g., language, religion, political ideology), disparity among nations and within them has been a recurring issue. In many cases change has been accompanied by strife within a nation's borders or by friction between immediate neighbours or distant countries.

A knowledge of global variations in population is fundamental to the study of issues within this section of the course. Births, deaths, and migration act in combination to produce population patterns. Human population is distributed unevenly, primarily because people tend to live in those areas that have climates and resources that are best suited to sustaining life. People want to live in countries, and in regions within countries, where the opportunities to live a good life are optimal.

A general overview of current cultural and political issues should initiate studies in this section. However, while the emphasis and focus of study should be placed on cultural and political issues, opportunities should be sought to broaden each topic or to integrate aspects of sections B and C into the study. As well, current events should determine, in some measure, the issues chosen for study.

There are many cultural and political issues that may serve as possible topics for study. Teachers shall select two major issues from or similar to those included in the accompanying list, one having a cultural focus and the other, a political one. The issues chosen for study must be global in scale.

Cultural and Political Issues: A Checklist

- minority groups within nations
 (e.g., Sikhs in India, Tamils in Sri
 Lanka, Basques in Spain, Kurds in
 Turkey, Asians in East Africa, Chinese
 in Malaysia)
- local wars or civil strife (e.g., in Northern Ireland, Lebanon, Nicaragua, Afghanistan)
- migration
- refugees
- the changing roles of men and women
- population density in relation to resource base: urban and rural densities, areas of overpopulation, areas of underpopulation
- population compositions and their effects: factors of demographic change, age-sex ratios, disparities in wealth, provision of public health, characteristics of the labour force
- forms of interdependence: military alliances, associations (e.g., the World Bank, the World Health Organization, the Commonwealth, la Francophonie, the United Nations)
- legacies of the past: wealth and poverty, land tenure, exploitation, colonialism, independence

Attitudinal Objectives

Students shall be provided with opportunities to:

- become aware that changes in a country affect groups within it in different ways;
- appreciate the complexity of dccision making;
- identify principles and concepts on which cultural and political decisions should be based.

Knowledge Objectives Students shall:

- examine specific cultural concerns that are seen as "issues";
- examine specific political concerns that are seen as "issues";
- consider the points of view put forward by those involved in each of the issues studied, together with the rationales behind the different opinions;
- understand adequately the specific terminology used to describe concepts and processes associated with cultural and political issues;
- understand techniques used in gathering data and translating it into visual formats that are informative, easily read, and unbiased;
- develop criteria that are useful in determining the significance of an issue.

Skills Objectives Students shall:

- access information from data banks
 and from government sources;
- work independently without supervision;
- retrieve information by using the following:
- a) card catalogue: author, title, and subject cards;
- b) books: table of contents, title page, glossary, illustration and map lists, footnotes, index, date of publication;
- c) atlases: table of contents, gazetteer, index:
- d) encyclopedia: key words, crossreferences, index;
- e) microfilm: back issues of newspapers, magazines, and periodicals;
- f) publications: periodical indexes, specialized reference materials such as those giving newspaper headlines and stories in brief;
- locate places on maps, photographs,
 and images by using a referencing
 system;
- transpose specific aspects of information from detailed maps to sketch maps;

- recognize features in photographs and satellite images, using such clues as shape, pattern, colour, shadows, shade, texture, relative size, and cultural and natural features;
- search for, recognize, and explain the patterns on maps and images;
- obtain information from first-hand sources by (a) planning an investigation and formulating questions that arc specific enough to aid in that investigation and (b) locating information that is pertinent to the area under study;
- complete a sampling of public opinion on a current issue. To accomplish this, they will have to:
- a) develop an appropriate questionnaire (in some cases it may be possible to administer the questionnaire);
- b) use carefully planned observation, counting, gathering, and recording procedures;
- c) plan and carry out an effective interview;
- d) record the information gathered;
- e) determine, through calculations, the degree of support for the issue from various segments of the community;
- f) communicate the results in graphic form;
- write a description of the differing points of view held by different people on a single topic or issue;
- write descriptions of their own experiences and opinions.

CANADA: ENVIRONMENT AND ECONOMY (GCE)



Introduction

ourses may be developed from this outline for a maximum of one credit. The prerequisite is one Senior Division social science credit at the advanced level. The common course code is GCE.

Course Rationale and Overview

anada is a unique country. It is large geographically, its people have relatively high incomes, and it has an unusually high trade dependency on the export of natural resources for a developed country. Only Australia is somewhat similar in these respects.

Natural resource exploitation began early in the history of the country and is still an important component of the economy, particularly in regard to exports. Given this importance, each of Canada's natural environments requires careful management to ensure that its resources can continue to contribute to the nation's economic base.

Because of the export importance of resources and the large size of Canada's trade as a percentage of the gross domestic product, the geography of Canada is affected by both internal and external factors.

Internally, Canada's capability to produce and market products efficiently is adversely affected by the

age of much of the country's machinery and equipment, short production runs for a relatively small domestic market, lack of an export orientation on the part of the manufacturing sector, and high transportation costs resulting from the nation's size. Although Canada has a substantial resource base and an increasing capability to provide expertise and technology in fields such as petroleum and mineral exploration, it is technologically dependent in many other areas. This dependency threatens its potential to maintain and improve its position as one of the significant developed nations in the world.

Canada is a relatively young nation. Students should be aware of the rapid transformation of many parts of the country from a sparsely settled nearwilderness to a complex, thoroughly integrated, modern landscape. In order to comprehend this transformation, students must examine significant topics that range in focus from the national to the regional level and that deal with issues and sectors of the economy that are vital to national development.

This course examines several themes based on the Canadian economy and environment. Students should be continually striving to identify the components of Canada's economic and environmental fabric, their characteristics, and the complexity of the interactions that have resulted in the nation's geography, both as it exists today and as it is likely to exist in the future.

It is important for students to be fully awarc of the current issues that affect Canada's geography. This course establishes a framework and context for examining and explaining such issues. Students should be given opportunities to research the geographic and historic contexts of events in order to interpret them properly. This should lead to an understanding of the complexity of the relationships

inherent in most issues and provide a breadth and depth of background information that is not usually available in the popular media.

One aim of this course is to give students both an understanding of and a perspective on the relationship of Canada's natural, economic, social, and political environments to the larger world community. Students should understand the forces influencing the destiny of Canadians and the alternatives available to them. Most importantly, they should understand that their own attitudes and values will play a part in shaping Canada's future development.

Course Objectives

A course based on this outline shall provide students with opportunities to:

- understand the major aspects of Canada's environmental systems and economy and the internal and external factors that shape them;
- identify the major interconnections between the environment and the economy;
- examine the significance of environmental systems in Canada's past development and their possible effects on future economic development and social well-being;
- explain the significance of environmental, economic, social, and political factors in the formation of Canada's long-term goals;
- understand the significance of regional variations with regard to the environment and economy;
- recognize the consequences to
 Canada and its regions of economic change and development;
- study issues and questions arising from the current distribution and composition of the Canadian population;
- demonstrate a level of skill in applying the geographic and cognitive inquiry skills outlined in Part B of this guideline;
- clarify their personal values and attitudes with respect to the formulation and achievement of national goals;
- continue to develop a reasoned pride in their country;
- bccome more receptive to, and tolerant of, the needs and aspirations of others.

Course Organization

Section	Description	Per Cent of Course
A. Canada's International Interdependence	The international economy is vast and complex and undergoes constant and rapid changes. Canada must compete successfully in the global economy and has many advantages in human and natural resources to enable it to do so.	20 – 30
B. Demographic Considerations	Population patterns, the dominance of the urban regions, the interaction between heartland and hinterland, and the composition of Canada's population are factors that must be considered in discussing and understanding Canada's environments and economy.	20-30
C. Canada's Industrial Geography	The manufacturing sector of Canada's economic structure, along with its primary, tertiary, and quaternary sectors, is examined in this section. The composition, distribution, capitalization, and internationalization of Canadian manufacturing are examined in detail.	20-30
D. Environmental Systems and Resource Management	Canada consists of distinctive natural environments, each of which contributes to the geographic base of the economy. Resource exploitation is an important part of Canada's highly complex economic activity and must be wisely managed.	20 – 30

Policy and Planning Considerations

When planning or implementing this course, teachers shall refer to:

- Parts A and B of this guideline;
- the introduction to this document on page 2;
- the major planning considerations for geography OACs on pages 3-5 in this document.

Course Outline

Section A: Canada's International Interdependence

anada's small population and the desire of Canadians to enjoy a high standard of living have contributed to the country's need to absorb many immigrants and to import ideas, products, and capital, thus exposing the nation to external influences. These economic and political influences have affected Canada's development and have made it necessary for the country to adjust its policies and development.

Like most other countries in the world, Canada is not completely selfsufficient. Raw materials, manufactured goods, and foods that eannot be produced here (or cannot be produced here at competitive prices) must be imported. The money to pay for these items is earned by selling competitively priced Canadian goods and services to other nations. As the world economy moves increasingly towards an integrated whole, Canada is experiencing the effects of the relocation of manufacturing industries to developing nations, competition from foreign sources of raw materials, worldwide fluctuations in the prices of raw materials, increases in the world's ability to produce food, and the allocation of capital by giant multinational corporations with global connections. At the same time international agreements by and national policies of other countries affect Canadian exports. Internally Canada's capability to produce and market products efficiently and cheaply is affected by its vast expanse, high transportation costs, and small population.

Attitudinal Objectives

Students shall be provided with opportunities to:

- clarify their personal values, attitudes, and responsibilities with respect to the formulation and achievement of national goals;
- become more receptive to, and tolerant of, the needs and aspirations of other individuals and nations.

Knowledge Objectives

Students shall:

- study examples of relationships between Canada and the United States in environmental, economic, cultural, and social fields;
- examine Canada's involvement in foreign aid;
- investigate the nature and extent of foreign investment in, and ownership of, Canadian companies;
- recognize the effects of international trade on specific regions and settlements;
- identify examples of industrial polieies that have affected the Canadian national economy or regional economies;
- learn the nature and location of Canada's main domestic markets;
- examine the nature and sources of capital and how it flows into and out of Canada;

- consider the nature and effects of tourism and leisure on the economy and the environment;
- understand the meanings of terms such as the following: staples trap, multinationals, gross domestic product (GDP), gross national product (GNP), free trade, General Agreement on Tariffs and Trade (GATT);
- study the major aspects of the invisible and visible trade between Canada and its major trading partners;
- identify the types of imports that cost Canadians jobs and the exports that create jobs;
- study the implications of free trade and protectionism for the Canadian economy;
- compare Canada's GNP or GDP to those of selected nations;
- investigate Canada's share of the major commodities in world trade;
- become aware of the fact that deregulation of Canada's financial markets has allowed an increasing number of foreign firms to operate in Canada;
- become familiar with the major importing and exporting countries with which Canada must compete;
- study examples of the influence, behaviours, and decisions of multinational corporations and other countries that seriously affect the Canadian economy.

Skills Objectives Students shall:

- construct and interpret graphs,
 charts, and tables and use statistical
 data related to trade;
- determine the relevance and accuracy of information gathered and the reliability of the sources of the information;
- use a variety of maps to locate and account for major trade routes and relate these routes to those used in Canada's trade;
- use a variety of maps to locate and account for major commodities involved in world trade and relate these commodities to those in which Canada has an important share;
- demonstrate a high level of skill in applying the inquiry model as outlined in Part B.

Topics for Study

The following topics may be used to assist students in achieving the section objectives outlined above.

- 1. Patterns of international trade. Particular emphasis should be placed on trade with the United States and the countries of the Pacific Rim. Students might undertake an analysis of current issues and consider the implications of current patterns and trends for the Canadian economy. The examination of trade might include a consideration of the following:
- current patterns of trade: major exports and imports; main trading partners; import penetration of the domestic market
- Canada's place as a supplier of raw materials and food
- comparisons of Canada's gross domestic product with that of some other nations
- Canada's place in the production of petrochemicals (e.g., a case study of Sarnia)
- the implications of free trade for the economic geography of Canada
- the future of Canadian trade in the global community

Section B: Demographic Considerations

- 2. Current trends in the world economy and their significance to Canadian economic development. The examination of trends might include the following:
- the changing location of the manufacturing of automobiles, iron and steel, textiles, electronic goods, and other products
- the trade in wheat and other grains
- the production and consumption of various forms of energy
- the capitalization, size, influence,
 and behaviour of multinational corporations and other countries
- the location of major areas of mineral production
- the growth in the tertiary and quaternary sectors
- other developments anticipated in the world economy
- 3. Environmental systems important to the Canadian economy and to world interdependence. The examination of cnvironmental systems might include a consideration of the following:
- trans-border exchanges of environmental elements (e.g., water, air)
- the implications of acid precipitation for various regions, settlements, and environments
- the effects of tourism and leisure activities on particular environments
- the effects of Canada's exports on specific environmental systems
- the effects of technological change on Canadian environments

By world standards the population of Canada is relatively small, and the density of population is among the lowest. The basic patterns of settlement and distribution were established in the early years of the country and reinforced by successive waves of immigrants in the early twentieth century. However, in the past fifty years the pattern of population distribution in Canada has changed considerably as a result of urbanization.

An understanding of the Canadian identity is dependent on an understanding of the distribution and composition of the Canadian people. Development in the country can be described in terms of the interaction between heartland and hinterland. Current trends indicate that urbancentred regions will dominate economic and political decision making in Canada. However, population concentration creates environmental, economic, and social issues that must be addressed. In this section students should investigate topics and issues arising from Canada's current population distribution and composition.

Attitudinal Objective

Students shall be provided with opportunities to appreciate the cultural mix of Canada's population.

Knowledge Objectives Students shall:

- understand the meaning of terms such as the following: population density, population distribution, agesex graphs, dependency load, overpopulation, underpopulation, population structure, participation rate by sex and age;
- know the approximate current population of Canada;
- study and explain the pattern of population distribution across Canada;
- examine the variations in population density and rates of change in population density across Canada;
- learn the locations, importance, and rank in size of the major urban areas in Canada;
- be aware of the nature of economic and political decision making that tends to encourage the concentration of population in urban-centred regions;
- examine the effects of urban concentration on the economic, political, and social life of the country;
- examine the interdependence of settlements in Canada;
- study the main cultural groups forming the population;
- investigate regional variations in age distribution, birth rates, and death rates;
- determine the regional distribution of Native Canadians;

- identify patterns of migration, domestically and between Canada and other countries;
- explain differences in economic activity related to age and sex, and the effects of part-time work;
- consider the types of regional and local adjustments that are necessary to cope with the shift in the structure of Canada's population;
- know the main issues related to population planning for the future;
- identify the main environmental issues resulting from population concentrations.

Skills Objectives Students shall:

- recognize patterns of population
 distribution by interpreting maps and
 satellite images that show patterns
 and by drawing maps that show
 patterns;
- use large data sets such as Canada's decennial census;
- determine the relevance of information gathered and the reliability of the source of the information;
- interpret and construct graphs,
 charts, and tables and use statistics
 related to demographic studies;
- write a description of factors affecting population distribution in Canada;
- assess the effects on Canada and its regions of the current population distribution and of migration;
- predict future developments in population growth and structure, taking into consideration the unpredictable effects of migration.

Topics for Study

The following topics may be used to assist students in achieving the section objectives outlined above.

- 1. Patterns of population composition and distribution in Canada. An examination of this topic might include a consideration of the following:
- patterns of immigration over the last century
- factors affecting population distribution
- factors accounting for the urbanization process
- issues arising from the age-sex composition of the population

- the effects of changing transportation and communications on population distribution
- patterns of interprovincial migration related to regional economic variations
- employment and unemployment issues related to regional economic variations
- sex differences related to economic activity
- the regional distribution of Native Canadians
- issues related to migrant foreign labour
- environmental and social issues arising from the concentration of population in urban-centred regions
- population as a labour force and a market
- predictions about future changes in Canada's population composition and structure

- 2. The Great Lakes—St. Lawrence Lowlands. Students might include the following in their examination of this topic:
- a definition of the region
- an explanation of the population concentration and growth in the region
- a determination of the factors that
 affected the industrial and commercial
 growth of the region in the past and
 an assessment of current influences
- areas of growth and decline in the economy
- an examination of the effects of population growth and economic activity on the natural environment
- issues arising from the need to move people and goods within a region of increasing population
- a prediction about future growth
 and development in the local community or region

- 3. A case study of a major Canadian urban centre. One of the following should be selected: Vancouver, Regina, Edmonton, Winnipeg, Toronto, Thunder Bay, Windsor, Ottawa, Montreal, Halifax. An examination of this topic might include a consideration of the following:
- the location of the urban centre
- the national rank of the urban centre in terms of population
- the nature of the economy
- factors affecting economic activity
- areas of growth and decline in the economy
- issues related to population size and growth
- the relation of population to economic activity and employment in the urban centre
- issues related to the rural-urban interface
- issues related to land use
- issues related to the transportation of people and goods within the urbancentred region
- a prediction about future growth
 and development in the city and its
 region
- the interdependence of Canadian settlements

- **4.** Urban and regional systems. An examination of this topic might include a consideration of the following:
- migration streams
- flows of information and goods, and the economie specialization of urban centres
- transportation and communications networks
- eentralization of the economy
- flows and linkages among sectors
- environmental issues related to urban and regional systems

Section C: Canada's Industrial Geography

The industrial structure of a country is often divided into three major sectors. The primary sector involves the extraction of natural resources; the secondary or manufacturing sector processes the products of extractive industries into finished products; the service or tertiary sector provides services necded by the extractive and manufacturing industries, and by society in general. A relatively recent subdivision, known as the quaternary sector, is sometimes considered separately. It includes that part of the work force that provides managerial, professional, and technical services to all industries and social activities.

One of the tasks of the secondary sector is to process the raw materials of the primary sector into usable and thus more valuable products. Unlike primary activities, which may cover extensive areas, manufacturing industries, individually, occupy little space. Collectively, however, they frequently form clusters of some size. The patterns of concentration of manufacturing reflect not only a certain affinity among manufacturing industries but also their attraction to other factors that encourage economically viable development and growth.

Manufacturing activity is not evenly distributed across Canada. The concentration of manufacturing in the Great Lakes–St. Lawrence Lowlands

reflects the interaction of raw materials, power, markets, labour, transportation, and capital, as well as political and historical factors. As a result of the concentration of manufacturing, the country consists essentially of metropolitan-dominated economies, even though manufacturing has been growing faster in recent years in non-metropolitan areas.

Manufacturing generally involves the investment of large amounts of capital. In order to obtain access to Canadian markets for finished goods and Canadian resources for export, large corporations from foreign countries have invested heavily in Canada's economy and continue to do so. Such foreign investment has both positive and negative effects. Canada is not alone in facing this issue, for it is only one of scores of countries learning to face up to the realities of the influx of foreign capital. It is also true, of course, that billions of Canadian dollars have been invested abroad, particularly in the United States.

Canadian manufacturers must constantly adapt their operations to cope with conditions in a changing world economy. In order to compete successfully in world markets, some Canadian manufacturers are adopting modern technology, specializing production in growth areas, and increasing their investment in research and development. Others are failing to keep pace. These changes are part of a phenomenon that is taking place on a worldwide basis.

The percentage of the labour force employed in the service sector has steadily increased, from about 47 per cent in 1941 to about 76 per cent in 1981. Together with other structural changes in the economy, productivity gains in primary industry and manufacturing have a large bearing on this trend. The service sector now contributes about 70 per cent of the GDP. Although the term postindustrial is used to describe Canadian society, in reality the manufacturing and service sectors are complementary. Quaternary occupations in manufacturing, the services, and primary industry are of vital importance to an economy increasingly dependent on information-based activities, innovation, and research and development.

Attitudinal Objectives Students shall be provided with

Students shall be provided with opportunities to:

- appreciate that there are regional disparities in Canada's economic development;
- evaluate the effects of regional disparities on Canadian national unity.

Knowledge Objectives Students shall:

- understand the meaning of terms such as the following: friction of distance, decentralization, information explosion, deindustrialization;
- examine the base of the Canadian manufacturing economy;
- investigate resource and environmental management issues resulting from industrial activities, particularly those of manufacturing;
- examine how the environmental impact of industry varies in different environments and regions;
- study the location of primary manufacturing;
- study the location of major secondary manufacturing;

- know the types of manufacturing associated with major urban centres;
- consider the effects of industrial policies on Canadian settlements;
- investigate types of technological change that affect industry;
- investigate the nature and extent of foreign capital penetration in Canada;
- learn about the major multinational corporations involved in the ownership of Canada's industries and assets;
- understand the nature and scope of industrial change;
- investigate the factors that influence the decentralization of industry;
- learn about Canada's main competitors in manufactured products;
- consider the types of research and development required to keep Canada competitive;
- examine the contribution of the tertiary sector to Canada's economy;
- know the effects of the quaternary occupations on the restructuring of the economy of Canadian cities;
- understand the nature of economic and political decision making, which is often dominated by national and foreign corporations;
- understand the nature and extent of the links between Canada's industrial geography and the United States.

Skills Objectives Students shall:

- use a variety of maps to determine the location and patterns of Canadian industries;
- apply the factors affecting industrial location;
- determine the relevance and accuracy of information gathered and the reliability of the sources of the information;
- weigh critically alternative solutions to several complex issues;
- write or speak with the aim of persuading others of a specific point of view, firmly basing their arguments on available data;
- use graphs, charts, and statistical tables to illustrate the importance of industry;
- use inquiry techniques to assess the effects of technology on an industry and on the environment;
- use inquiry techniques to suggest the future of industry, or specific industries, in Canada.

Topics for Study

The following topics may be used to assist students in achieving the section objectives outlined above. They may be examined from a regional perspective, a sector perspective, or both.

- 1. Secondary-sector activities. These include industries involved in the manufacture of such products as food and beverages, clothing, wood products, paper and allied products, primary metal, machinery, transportation equipment, and chemicals.
- 2. Tertiary-sector activities. These include retail stores; transportation; communication and other utilities; trade; finance, insurance, and real estate; community, business, and personal services; public administration; and defence.
- 3. Quaternary-sector activities. This is the part of the occupational structure that provides the managerial and professional services involved in information processing and decision making. The occupational groups of this sector are found functioning in the other sectors, but are often grouped separately.

In dealing with these topics, students might examine the following aspects of them:

- the location of the industry
- factors accounting for the location
- dominant cities involved in the industry and associated types of industries also located in them
- the ownership of the industry
- cffects of forcign ownership
- the technology affecting the industry
- the methods used for and the results of overcoming the friction of distance
- the labour force involved
- decentralization of the industry
- types of research and development being undertaken
- rural depopulation
- the disappearance of villages
- the high vulnerability of singleindustry towns
- the dominance of metropolitan centres
- the futurc

Section D: Environmental Systems and Resource Management

Much of Canada's growth and development has been based on the use of natural resources. Resource exploitation began in Canada with the first hunting and gathering activities of the Native peoples. Later, it manifested itself in the European fisheries off the coast of Newfoundland, the extensive fur trade in beaver and other pelts, the lumber industry, agriculture, and mining.

Resource exploitation is significantly different today from what it was in the past. It has become a highly complex activity, involving domestic and forcign capital, advanced technology, a decline in the quantity of the labour required, more efficient transportation, and the use of an increasing variety of forms of energy production.

Accompanying the growth have been significant changes in the natural environment and a perceived scarcity of some resources. As a result, environmental and resource issues have become important to all Canadians. Canada is made up of a number of distinctive natural environments. Each contributes to the resource base of the economy, and each requires wise management if it is to be used in the best long-term interests of both the local population and all other Canadians. The World Conservation Strategy lists three main priorities for such conservation and development: the maintenance of life-support systems, the preservation of genetic diversity, and the sustainable use of species and ecosystems.

Primary economic activities, which involve the exploitation of natural resources and raw materials, include agriculture, fishing, forestry, and mining. These activities have a very direct relationship to environmental systems and are capable of causing considerable environmental degradation if not properly managed.

In this section students should acquire an overview of a distinctive physical region of Canada and an understanding of the relationship of the primary economic sector to the physical region, the basic principles of environmental systems and resource management related to the exploitation of a resource in the region, and the relationship of growth and development in the selected region to other Canadian regions.

Attitudinal Objectives

Students shall be provided with opportunities to:

- clarify their personal values and attitudes with respect to the consumption of natural resources;
- appreciate that individuals have a responsibility to conserve resources and protect the environment in and beyond Canada;
- participate in activities that result in the improvement of the environment.

Knowledge Objectives Students shall:

- understand the meaning of terms and phrases such as the following: ecological system, environmental equilibrium, environmental-impact statement, environmental systems, resource (renewable and non-renewable), primary industry, resource management, multiple-use management, conservation, preservation, rejuvenation, amenity value, aesthetic value, legislation, competing interests;
- learn the main physiographic, climate, vegetation, and soil regions of Canada;
- understand the relationships among the components of environmental systems;
- examine the susceptibility of a particular environment to degradation
 by human activity;
- identify types of human interventions that can cause degradation in representative environmental systems;

- investigate some of the methods used to manage environments;
- consider how political structures are involved in environmental management and the nature of legislation aimed at protecting the environment;
- learn the social and economic goals and priorities of a particular region of Canada;
- understand the nature of compromises necessary to attain environmental goals;
- examine the types and magnitude of environmental issues affecting Canada–United States relations;
- study the location and importance of a primary industry in a selected region of Canada;
- consider the uneven distribution of resources across the country;
- understand the effects of overreliance on a single resource;
- study the methods of exploiting, transporting, and using a selected resource;
- study the methods of conserving or rejuvenating an exploited resource.

Skills Objectives Students shall:

- write a comprehensive, coherent description of a primary industry and its ecological and economic relationships;
- use a variety of maps to determine the location and patterns of distribution of one primary industry;
- undertake research, which should include determining the relevance and accuracy of the information gathered, the reliability of the sources of the information, and how to use references and footnotes;
- apply the locational factors to aceount for the location of a primary industry;
- use inquiry techniques to assess the effects of technology on an industry;
- use graphs, eharts, and statistical tables to illustrate and identify the importance of a primary industry;
- draw diagrams to illustrate the major relationships involved in environmental systems.

Topics for Study

The following topies may be used to assist students in achieving the section objectives outlined above.

- 1. A managed environment in the vicinity of the school. The area may be a pareel of managed land such as a conservation area, a county forest, or a local or provincial park. Students should be made aware of the basic concepts of environmental systems and the skills and attitudes necessary to manage them. The study might include the following components:
- *location:* both absolute and relative to other physical and cultural features and boundaries
- *inventory:* physical and biological components, unique or rare habitats and species, components sensitive to change, associations and relationships within a community
- reasons for management: (a) eeologieal: water, energy, and nutrient eyeles; relationships among systems; (b) eeonomie: resource harvesting, eommunity use, eost and benefit considerations; (c) social: public use, aesthetic value, public education
- history: motivation and timing for the decision to manage; actions taken by individuals, groups, and governments; legislation passed and administration established

- effects: degree of ehange in each eomponent of the environment, eurrent differences in the operation of the basic environment processes
- legislation: legislative authority; eomposition and organization of the government body; extent of its responsibility for policy setting and decision making; relationships between legislation, policy, and management; short-term and long-term goals; pressure for ehange; new issues or emerging problems
- management: staff organization and responsibilities, qualifications and training of staff, specific tasks undertaken, resource-management techniques employed
- evaluation: the philosophy of conservation being implemented and the suecess of the management policy

- 2. A major physical region of Canada and a resource from the primary sector of the economy found in that region.

 The study of this topic might include the following:
- a description of the systems and subsystems that make up the environment
- a description of how the industry relates to the environmental system and subsystems
- a description of environmental effects resulting from the exploitation of one natural resource
- a summary of the importance of the natural resource to the economies of both the region and Canada
- an identification of issues related to the sustained use of the environment and the natural resource
- an identification of methods to conserve and rejuvenate the environment and the natural resource
- a proposal, with strategies, to maintain and enhance the quality of the environment while still exploiting the resource

- a prediction of what the future holds for the environments of the region and for the natural resource
- the nature of tourism and leisure activities in the region
- the effects on the environment of tourism and leisure activities in the region
- **3. One environmental issue of national or international significance.** The study of this topic might include the following:
- a description of the issue
- an investigation of actions that have been taken
- predictions about likely results of present actions
- suggestions for alternative actions that might be taken
- recommendations for, and a defence of, a course of action to resolve the issue

- The following are examples of issues that might be considered:
- water levels: the Garrison Dam proposal, Canada's Law of the Sea policy, the International Joint Commission on the Great Lakes
- water quality: the Great Lakes, Lake
 Champlain, Columbia River Basin,
 Skagit River-Ross Dam
- water diversion: proposals to divert water from a number of Canada's northerly flowing rivers to waterdeficient areas of the United States (e.g., NAWAPA)
- bilateral coastal issues: oil transportation routes along the coasts, the exploitation of resources in the Beaufort Sea
- marine issues: fisheries disputes on both coasts; unresolved boundary disputes over the Strait of Juan de Fuca, the Dixon Entrance, and the Beaufort Sea; the World Court decision concerning George's Bank
- air quality: air pollution from a variety of Canadian and American sources, lead in the environment
- economic competition: costs of production versus costs of environmental protection for resource industries such as forestry and mining, concern for pollution versus competitive price
- waste disposal: nuclear waste disposal







GEOGRAPHY

